

NOTE ON A CALIFORNIAN LOLIGO.

BY HENRY HEMPHILL.

In the July (1891) number of the Nautilus, in an article under the heading "Edible Shell Notes," Mr. R. E. C. Stearns mentions a "Ten-armed Cephalopod" which he had seen offered as an article of food in the San Francisco markets. Recently, while passing through the San Francisco and Oakland markets, I found a form of a loligo lying on the stalls of the fish dealers, which they offered at twenty-five cents per pound, and which I think is the "Ten-armed Cephalopod" referred to by Mr. Stearns. Dr. Cooper informs me he had observed a shoal of loligo at Monterey, some years ago, but having no net he was unable to secure a specimen. These that we find here in the markets now are said, by the fish dealers, to be taken in nets outside the Heads by the Chinese fishermen.

The body and arms of my largest specimen measures about ten inches, the two longest arms being about three inches longer. The arms are not webbed, but each of the eight short ones have two rows of suckers their entire length, while the two other arms have a small patch of small suckers towards their tips. It took nine individuals of those I purchased from the fish dealer to weigh a pound, so we may say they weigh about two ounces each. In cleaning for cooking they will lose about half their weight, and each one will then furnish about one ounce of flesh.

In preparing them for cooking, after having removed the outer skin, pen, head, arms and entrails, they should be carefully washed, and fried in plenty of hot butter or fat, and seasoned to the taste.

Those which I had prepared and cooked were a little tough, though quite palatable, being nicely flavored, but they never will take the place of the delicious oysters and clams that have inspired poets to sing their praises.

In the form of its body and the coloring, as well as in the form of the pen, it closely resembles *Loligo Gahi* D'Orbigny, but as I have no other material with which to compare it, and no description of that form, I cannot say definitely whether it is that species or not. This form makes an interesting addition to our west coast Cephalopods, and if upon further study I should conclude it to be new I propose to call it *Loligo Stearnsii*.

The following is a list of all the Cephalopods known to our coast, from San Diego to Alaska:

ARGONAUTA ARGO L.

OCTOPUS PUNCTATUS Gabb.

AMMOSTREPES AYRESII Gabb.

AMMOSTREPES GIGANTEUS Gabb.

ONYCHOTEUTHIS FUSIFORMIS Gabb.

A NEW ASTRAGALUS.

BY SERENO WATSON.

ASTRAGALUS GRALLATOR n. sp. Perennial, the decumbent stems nearly two feet long, glabrous or nearly so: stipules distinct, acuminate-deltoid; leaves finely appressed-pubescent or glabrate, about 3 inches long; the narrowly oblong leaflets (about 20) 5 to 10 lines long: racemes loose, erect on peduncles exceeding the leaves; pedicels very slender, erect, 3 or 4 lines long: flowers small (3 lines long), pale rose-color or white; calyx-teeth narrow, shorter than the narrowly campanulate tube: pod (immature) 3 lines long, ascending upon a stipe nearly equalling the calyx, thin-coriaceous, nearly glabrous, transversely rugose, straight, 1-celled, at first compressed, becoming somewhat obcompressed-turgid, roundish dorsally and the ventral suture prominent.—At Steamboat Springs, Routt County, Colorado. Peculiar in its unusually long, slender pedicels, etc. In some respects it resembles species of the *Homalobi* section, but it is more nearly related to the *Bisulcati*, though the pod is not at all furrowed on the ventral side.

[The above Astragalus was found at Steamboat Springs in July, 1891, by the writer and sent to Dr. Watson for identification. It grew on the banks of a small stream in adobe soil, and has the odor of carrion peculiar to the Astragali that are found in similar localities. The flowers are white, but turn light pink in drying. It was a single plant, large and with many stems, and grew where *Astragalus Haydenianus* was very abundant. It was referred to in The Additions to the Flora of Colorado, Zoe, vol. ii, No. 3, as *A. Grayi*.

The manuscript was found by Mr. B. L. Robinson among Dr. Watson's papers and kindly sent to Zoe for publication.

ALICE EASTWOOD.]